

**Before the
Federal Communications Commission
Washington, D.C. 20554**

In the Matter of)	
)	
Amendment of Part 90 of the Commission's)	WP Docket No. 07-100
Rules		

**COMMENTS OF THE SAN FRANCISCO BAY AREA REGIONAL INTEROPERABLE
COMMUNICATIONS SYSTEMS AUTHORITY (BAYRICS) ON THE SIXTH
FURTHER NOTICE OF PROPOSED RULEMAKING**

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I. INTRODUCTION

The San Francisco Bay Area Regional Interoperable Communications System Authority (“BayRICS”) hereby submits these Comments in the above-captioned matter.¹ These Comments are limited to a brief description of number and scope of public safety projects within BayRICS’ jurisdiction utilizing spectrum in the 4.9 GHz band (4940-4990 MHz). These Comments support BayRICS conclusions that

- 1) Bay Area public safety agencies are currently engaged in active and continuous use of 4.9 GHz band—the band is not underutilized, at least in the Bay Area;
- 2) The Commission is correct to “grandfather” existing licensees, but must go further to protect existing and planned public safety projects using the band and avoid taking actions that would subject public safety licensees to additional interference, costs or other burdens; and
- 3) The Commission must not allow any sort of mandatory “sharing” with non-public safety entities unless it determine that such sharing will cause no interference or impose additional costs on Bay Area public safety operations. Specifically, BayRICS opposes re-designating the 4.9 GHz band, in whole or in part, to support commercial wireless use in the San Francisco Bay Area.

BayRICS generally supports the Comments filed by our Member Agencies and by San Francisco Bay Area Rapid Transit District (BART) in the above-captioned matter.

II. USE OF 4.9 GHZ BAND IN THE SAN FRANCISCO BAY AREA IS ACTIVE AND CONTINUOUS

Public Safety Agencies in the Bay Area are using the 4.9 GHz Band in many innovative and important ways. A search of the FCC ULS database indicates that 58 active 4.9 GHz licenses are on file in the 12-county greater Bay Area.²

¹ Members of the BayRICS Authority include the City and County of San Francisco, City of Oakland, City of San Jose, Counties of Alameda, Contra Costa, Marin, San Mateo, Santa Clara and Sonoma, California, as well as “hub” city groups from the East Bay and South Bay.

² See Exhibit A.

BayRICS polled Bay Area agencies to determine how these licensed frequencies are being used. Examples of the responses we received include:

- The Sonoma County Sheriff has a 4.9 GHz license, WQHT980, which covers the agency countywide. The Sheriff currently operates six point-to-point microwave links carrying IP traffic connecting two off site dispatch centers to the main office. The Sheriff's helicopter also uses a 4.9 GHz downlink to transmit video to ground assets. In addition, Sonoma County Sheriff has initiated the following projects involving the 4.9 GHz band: 4.9 GHz connectivity to a city police department to tie in their dispatch center to county communications equipment (two microwave links); building a new IP connected radio system for this city police department, connecting four communications sites in a ring for redundancy (four microwave links); building a fire camera system of IP cameras which backhaul over our licensed 6 GHz and 11 GHz microwave, with the last hop using 4.9 GHz links to some of the remote sites (five microwave links); building network connectivity for the County water agency to one of their treatment plants (three microwave links); replacing a 5.8 GHz link to a fire department network that serves fire department printers from dispatch, Sheriff Substation data, firefighter Wi-Fi internet, and a radio direction finding node (one microwave link). Finally, the agency may use this spectrum to backhaul the data for a weather radar station being installed in the coming months.
- San Francisco Bay Area Rapid Transit District (BART) has a geographical license of 60 km from Lake Merritt for all frequencies in this band. BART is using 4.9 GHz for police video surveillance on trains and are also planning to use it for a new communications-based Train Control System throughout the District. BART will need 4.9 GHz coverage at least 2 miles either side of all BART tracks and right of way on 130 miles of track and tunnels without interference from others.
- San Mateo County is operating six point-to-point microwave radio links throughout the County under a single 4.9 GHz license. Of the six point-to-point microwave links, three are used by the Sheriff's Office for data links and the remaining three are used for backhaul of the P25 radio system.
- Solano County is operating five (5) point-to-point microwave radio links throughout the County under a single 4.9 GHz license. Of the five (5) point-to-point microwave links, three (3) are used for permanent-site infrastructure backhaul for a simulcast LMR Public Safety radio system, and two (2) are used for temporary-site backhaul of LMR channels for incidents/events.
- The County of Santa Clara currently has a license with planned use for point-to-point and point-to-multipoint systems. The County has experienced difficulties securing 6 GHz or 11 GHz MW licenses and is actively planning

to begin 4.9 GHz for point-to-point links. The County is also planning a 4.9GHz point-to-multipoint system to extend a data network for public safety agencies, primarily Sheriff Deputies and Park Rangers, in areas that are not supported by commercial LTE services at this time.

III. THE COMMISSION SHOULD EXERCISE CAUTION WHEN IMPOSING ALTERNATIVES TO FACILITATE INCREASED USAGE IN THE BAY AREA

The above examples of current and planned usage of the 4.9 GHz band and the high number of active licenses issued in this region indicate that the band is being used actively and continuously by public safety in the Bay Area. There is little need for the Commission to encourage greater use of the band, at least in the Bay Area, and therefore no reason to pursue the alternatives proposed by the Commission aimed at “opening up the band to additional uses that will facilitate increased usage.”

Although BayRICS expresses no opinion at this time on the majority of actions proposed by the Commission in this rulemaking, we urge the Commission to act cautiously with respect to any proposed changes to the current rules that would open the band to non-public safety purposes. The Commission is correct to “grandfather” existing public safety licensees but it must go further to protect existing and planned public safety projects using the band and avoid rule changes that would subject public safety users to additional interference, costs or other burdens.

For example, the Commission should not allow any sort of mandatory “sharing” of frequencies in the band with non-public safety agencies unless it determines that such sharing will cause no interference with Bay Area public safety operations and public safety uses. Sharing should be allowed only when there is an agreement in place with a public safety entity and the use is for a public safety purpose.

Likewise, the Commission should avoid re-designating the 4.9 GHz band, in whole or in part, to support commercial wireless use in the Bay Area. Given the widespread use of the band and the geographic reach of existing licenses across entire counties or public safety service areas, any anticipated commercial use would likely cause interference with grandfathered public safety licenses in the Bay Area. Nothing in the record supports a conclusion that the harmful effects of such interference could be eliminated or mitigated without significant cost or negative impact on the public safety licensee.

IV. CONCLUSION

The active and planned uses of 4.9 GHz in the Bay Area will help meet the critical communications needs of public safety—thus saving lives and protecting property. BayRICS joins with other Bay Area public safety agencies to urge the Commission to avoid taking any action that would interfere with or limit the ability of public safety to meet these critical needs.

EXHIBIT A

License Search - Search Results

<http://wireless2.fcc.gov/UlsApp/UlsSearch/results.jsp?licSearchKey=lic...>

License Search Search Results

Specified Search




State = California

County = ALAMEDA, CONTRA COSTA, MARIN, MONTEREY, NAPA, SAN BENITO, SAN FRANCISCO, SAN MATEO, SANTA CLARA, SANTA CRUZ, SOLANO, SONOMA

Frequency Upper Band >= 4990

Frequency Assigned <= 4940

Matches 1- 10 (of 63)

 = Pending Application(s)
 = Termination Pending
 = Lease

Call Sign/Lease ID	Name	FRN	Radio Service	Status	Expiration Date
1 WPYL723	San Francisco, City and County of	0001540731	PA	Active	09/04/2023
2 WPYR374	CALIFORNIA, STATE OF	0001724541	PA	Active	10/04/2023
3 WQBV233	CONTRA COSTA, COUNTY OF	0001540145	PA	Active	12/21/2024
4 WQCN504	County of Monterey	0004120390	PA	Active	04/15/2025
5 WQCQ306	City Of Sacramento	0001540814	PA	Active	04/29/2025
6 WQCV964	California Department of Transportation, Office of Radio Communications	0011640398	PA	Active	06/08/2025
7 WQDI366	Davis, City of	0001541739	PA	Expired	09/02/2015
8 WQDN269	SANTA CRUZ, COUNTY OF	0004514360	PA	Active	10/06/2025
9 WQDN561	County of Lake	0001539329	PA	Active	10/08/2025
10 WQDN910	City of Santa Ana Fire Department - Communications	0014047419	PA	Expired	10/12/2015
Call Sign/Lease ID	Name	FRN	Radio Service	Status	Expiration Date

* Please note search results do not return licenses that contain geometry data issues.

License Search

Search Results

Specified Search




State = California

County = ALAMEDA, CONTRA COSTA, MARIN, MONTEREY, NAPA, SAN BENITO, SAN FRANCISCO, SAN MATEO, SANTA CLARA, SANTA CRUZ, SOLANO, SONOMA

Frequency Upper Band >= 4990

Frequency Assigned <= 4940

Matches 11- 20 (of 63)

 = Pending Application(s)
 = Termination Pending
 = Lease

Call Sign/Lease ID	Name	FRN	Radio Service	Status	Expiration Date
11 WQDY346	City & County of San Francisco SFPUC ITS-SCADA	0024264681	PA	Active	11/29/2025
12 WQEG830	CITY OF SAN CARLOS	0014564694	PA	Expired	01/23/2016
13 WQEK769	EAST BAY REGIONAL PARKS DISTRICT	0001539543	PA	Active	02/23/2026
14 WQEK770	MARIN, COUNTY OF	0001540038	PA	Active	02/23/2026
15 WQEK897	County of Monterey	0004120390	PA	Active	02/24/2026
16 WQFL395	City of Santa Rosa	0015364839	PA	Active	08/09/2026
17 WQFP728	County of Solano	0004514345	PA	Active	09/02/2026
18 WQFQ384	City of Suisun City	0015414469	PA	Active	09/07/2026
19 WQFS531	San Mateo, County of	0001539840	PA	Active	09/22/2026
20 WQFU559	Santa Clara, City of	0004120440	PA	Active	10/06/2026

Call Sign/Lease ID	Name	FRN	Radio Service	Status	Expiration Date
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Frequency Upper Band >= 4990

Frequency Assigned <= 4940

Matches 21- 30 (of 63)

 = Pending Application(s)
 = Termination Pending
 = Lease

Call Sign/Lease ID	Name	FRN	Radio Service	Status	Expiration Date
21 WQGG679	THE REGENTS OF THE UNIVERSITY OF CALIFORNIA	0001538784	PA	Active	01/11/2027
22 WQGI917	City of San Mateo Police Department	0001540673	PA	Active	02/01/2027
23 WQGL631	County of Monterey	0004120390	PA	Active	02/23/2027
24 WQGV803	Zone 7 Water Agency	0026270009	PA	Active	04/30/2027
25 WQGW768	CITY OF OAKLAND	0001541119	PA	Active	05/09/2027
26 WQHB516	Livermore, City of	0006260855	PA	Expired	06/20/2017
27 WQHJ536	Santa Cruz Consolidated Emergency Communications Center	0016800575	PA	Active	08/14/2027
28 WQHT980	Sonoma, County of	0001539717	PA	Active	11/06/2027
29 WQIR384	Half Moon Bay PD, City of	0001537109	PA	Active	04/21/2028
30 WQIU673	SAN LUIS OBISPO, COUNTY OF	0001526912	PA	Active	05/19/2028

Call Sign/Lease ID	Name	FRN	Radio Service	Status	Expiration Date
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License Search
Search Results

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State = California

County = ALAMEDA, CONTRA COSTA, MARIN, MONTEREY, NAPA, SAN BENITO, SAN FRANCISCO, SAN MATEO, SANTA CLARA, SANTA CRUZ, SOLANO, SONOMA

Frequency Upper Band >= 4990

Frequency Assigned <= 4940

Matches 31- 40 (of 63)

 = Pending Application(s)
 = Termination Pending
 = Lease

Call Sign/Lease ID	Name	FRN	Radio Service	Status	Expiration Date
31 WQIZ321	Bay Area Air Quality Management District	0016388746	PA	Canceled	06/26/2018
32 WQJG516	City of Sand City Police	0018071142	PA	Active	08/29/2018
33 WQJJ741	EAST BAY MUNICIPAL UTILITY DISTRICT	0001539568	PA	Active	10/03/2018
34 WQJQ374	National Railroad Passenger Corporation	0002159770	PA	Active	11/24/2018
35 WQJW932	City of Folsom	0018403337	PA	Active	01/29/2019
36 WQKD337	City of Walnut Creek, CA	0008775322	PA	Active	04/07/2019
37 WQKD457	Alameda County Communications Department	0001540236	PA	Active	04/08/2019
38 WQLC708	Yolo County Flood Control and Water Conservation District	0001541663	PA	Active	12/07/2019
39 WQLF408	Yolo County Flood Control and Water Conservation District	0001541663	PA	Active	01/05/2020
40 WQML952	San Francisco Bay Area Rapid Transit District	0001544063	PA	Active	09/21/2020

Call Sign/Lease ID	Name	FRN	Radio Service	Status	Expiration Date
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License Search

Search Results

Specified Search

State = California

County = ALAMEDA, CONTRA COSTA, MARIN, MONTEREY, NAPA, SAN BENITO, SAN FRANCISCO, SAN MATEO, SANTA CLARA, SANTA CRUZ, SOLANO, SONOMA

Frequency Upper Band >= 4990

Frequency Assigned <= 4940

Matches 41- 50 (of 63)

PA = Pending Application(s)
 TP = Termination Pending
 L = Lease

Call Sign/Lease ID	Name	FRN	Radio Service	Status	Expiration Date
41 WQMN954	LIVERMORE, CITY OF	0020178364	PA	Active	10/07/2020
42 WQNV472	San Mateo Pre-Hospital Emergency Services Providers	0014870265	PA	Active	06/08/2021
43 WQOB813	SANTA CLARA, COUNTY OF	0001539824	PA	Active	08/05/2021
44 WQQB936	San Francisco, City and County of	0001550318	PA	Active	10/20/2022
45 WQQC567	Solano Irrigation District	0007402522	PA	Active	10/26/2022
46 WQRC957	County of Yolo	0022621650	PA	Active	04/18/2023
47 WQRM983	San Francisco, City and County of	0001540731	PA	Active	06/21/2023
48 WQUF527	Palo Alto, City of	0001541085	PA	Active	06/24/2024
49 WQVW846	City of Walnut Creek, CA	0008775322	PA	Active	06/02/2025
50 WQWI641	Muir Beach Community Services Distrct	0023666290	PA	Active	09/01/2025

Call Sign/Lease ID	Name	FRN	Radio Service	Status	Expiration Date
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License Search

Search Results

Specified Search

State = California

County = ALAMEDA, CONTRA COSTA, MARIN, MONTEREY, NAPA, SAN BENITO, SAN FRANCISCO, SAN MATEO, SANTA CLARA, SANTA CRUZ, SOLANO, SONOMA

Frequency Upper Band >= 4990

Frequency Assigned <= 4940

Matches 51- 60 (of 63)

PA = Pending Application(s)
 TP = Termination Pending
 L = Lease

Call Sign/Lease ID	Name	FRN	Radio Service	Status	Expiration Date
51 WQWI642	Muir Beach Community Services District	0023666290	PA	Active	09/01/2025
52 WQXF656	Dublin San Ramon Services District	0025279498	PA	Active	02/22/2026
53 WQXF988	Dublin San Ramon Services District	0025279498	PA	Active	02/24/2026
54 WQYA642	Dublin San Ramon Services District	0025279498	PA	Active	08/01/2026
55 WQYA643	Dublin San Ramon Services District	0025279498	PA	Active	08/01/2026
56 WQYA645	Dublin San Ramon Services District	0025279498	PA	Active	08/01/2026
57 WQYA646	Dublin San Ramon Services District	0025279498	PA	Active	08/01/2026
58 WQYA647	Dublin San Ramon Services District	0025279498	PA	Active	08/01/2026
59 WQYA648	Dublin San Ramon Services District	0025279498	PA	Active	08/01/2026
60 WQYA961	Dublin San Ramon Services District	0025279498	PA	Active	08/03/2026

Call Sign/Lease ID	Name	FRN	Radio Service	Status	Expiration Date
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License Search

Search Results

Specified Search




State = California

County = ALAMEDA, CONTRA COSTA, MARIN, MONTEREY, NAPA, SAN BENITO, SAN FRANCISCO, SAN MATEO, SANTA CLARA, SANTA CRUZ, SOLANO, SONOMA

Frequency Upper Band >= 4990

Frequency Assigned <= 4940

Matches 61- 63 (of 63)

 Pending Application(s) Termination Pending Lease

Call Sign/Lease ID	Name	FRN	Radio Service	Status	Expiration Date
61 WQYW917	MIDPENINSULA REGIONAL OPEN SPACE DISTRICT	0005751540	PA	Active	02/15/2027
62 WRAG543	California Institute of Technology	0026880153	PA	Active	11/09/2027
63 WRAG545	Monterey One Water	0026882191	PA	Active	11/09/2027

Call Sign/Lease ID	Name	FRN	Radio Service	Status	Expiration Date
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